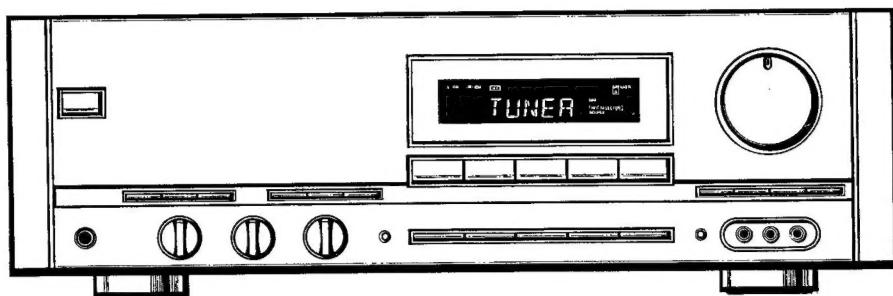


SERVICE MANUAL

LA-7500



SPECIFICATION

Audio Section

Continuous average power output is 100 watts (or 130 watts) per channel, min., at 8 ohms from 1 KHz with no more than 0.05% total harmonic distortion.

Input (Sensitivity/Impedance)

Phono MM	2.5mV/47KΩ
MC	0.25mV/100Ω
Tuner, CD, Aux, Tape1/Dat Play, Tape2/Video1 Play, Tape3/Video2 Play, Adaptor In	150mV/47KΩ

Phono Overload Level

(T.H.D. 0.1%, 1KHz)	100mV
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Output (Level/Impedance)

Tape1/Dat Rec, Tape2/Video1 Rec, Tape3/Video2 Rec, Adaptor Out	150mV/2.2KΩ
Headphone	67mV/8Ω

Frequency Response

Phono MM 20Hz – 20 KHz	±1dB
Tuner, CD, Aux, Tape1/Dat Play, Tape2/Video1 Play, Tape3/Video2 Play, Adaptor in 10Hz – 50KHz	±3dB

Tone Control

Bass 100Hz	±10dB
Treble 10KHz	±10dB

Subsonic Filter 15Hz (6dB/oct)	-3dB
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High Filter 8KHz (6dB/oct)	-3dB
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Hum and Noise (IHF, short circuited, A network)

Phono MM	72dB
Tuner, CD, Aux, Tape1/Dat Play, Tape2/Video1 Play, Tape3/Video2 Play, Adaptor In	95dB

Speaker Load Impedance

A or B	8–16Ω
A and B	16Ω
Surround	8–16Ω

Video Section

Input (Sensitivity/Impedance)

Video1 In, Video2 In	1Vp-p
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Output (Level/Impedance)

Video1 Out, Video2 Out, Monitor1, 2	1Vp-p
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Miscellaneous

Power Requirements	AC230V, 50Hz
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Power Consumption	420W (or 540W)
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Dimensions	458(W)x135(H)x300(D) mm
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Weight (without package)	12.4kg
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Furnished Parts

Remote control cord	1
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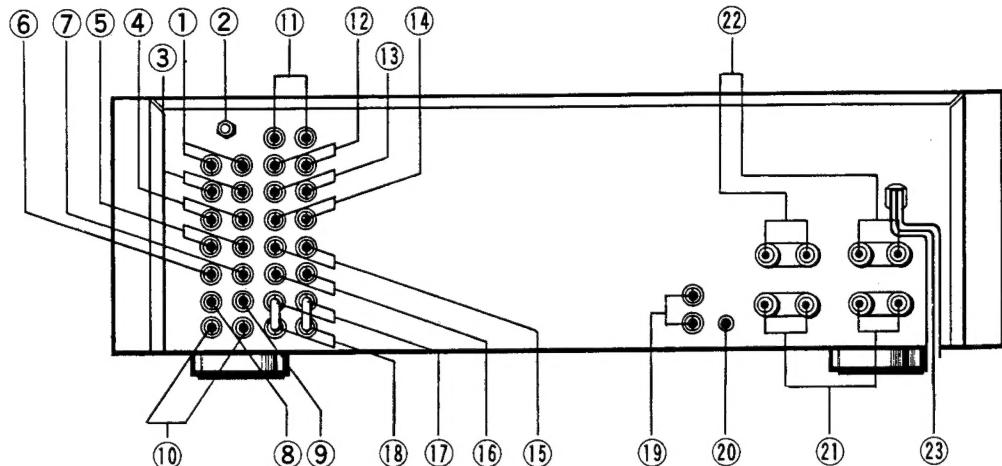
Operating Instructions	1
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NOTE:

Specifications and design subject to possible modification without notice due to improvements.

PANEL FEATURES

BACK PANEL



1. PHONO Input Terminals

2. Turntable Ground Terminal

3. AUX Input Terminals

4. TAPE3/VIDEO2 Audio Output Terminals

5. TAPE3/VIDEO2 Audio Input Terminals

6. VIDEO2 Video Output Terminal

7. VIDEO2 Video Input Terminal

8. VIDEO1 Video Output Terminal

9. VIDEO1 Video Input Terminal

10. MONITOR Terminals

11. TUNER Input Terminals

12. CD Input Terminals

13. TAPE1/DAT REC Terminals

14. TAPE1/DAT PLAY Terminals

15. TAPE2/VIDEO1 Audio Output Terminals

16. TAPE2/VIDEO1 Audio Input Terminals

NOTE:

Connect the white plug to the L (left) side, and the red plug to the R (right) side. Be sure to push the plugs in securely.

17. ADAPTOR Output Terminals

18. ADAPTOR Input Terminals

NOTE:

The ADAPTOR terminals are used when connecting an adaptor unit.

When not connecting an adaptor unit, be sure to install the connecting bars. If the connecting bars are removed, sound will no longer be emitted from the speakers.

19. SURROUND Output Terminals.

20. REMOTE INPUT Terminal

Connect to the REMOTE OUTPUT terminal of the TUNER (LT-7500)

NOTE:

When not connecting the remote and the audio terminals of the TUNER (LT-7500), will be not remote control.

21. SPEAKERS B terminals (left and right channels)

22. SPEAKERS A terminals (left and right channels)

Connect (+) to the speaker's (+) side, and (-) to the speaker's (-) side.

NOTE:

Do not allow the wire core to protrude and touch other terminals or wires.

If the cores of differing wires touch, damage may be caused to your components.

NOTE:

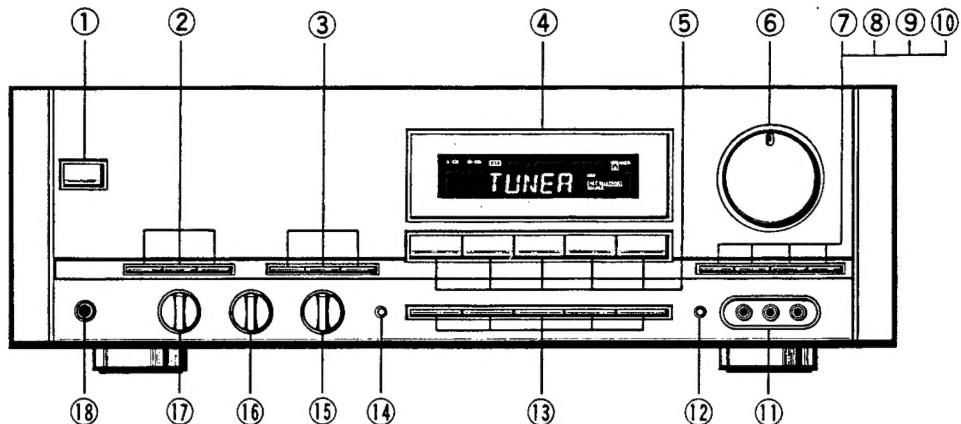
When speaker systems are connected to only one of the SPEAKER A, B terminals, such speakers should have rated impedance in the range of 8 – 16 ohms.

23. AC Power Cord

Connect this cord to the AC power outlet of the TUNER (LT-7500).

PANEL FEATURES

FRONT PANEL



1. Power Switch

Push this switch to turn on or turn off power.

2. Speakers Selector Switches

Use this selector to select the speaker systems.

- [A] — Use this switch to listen to the speaker systems connected to the SPEAKERS A terminals.
- [B] — Use this switch to listen to the speaker systems connected to the SPEAKERS B terminals.
- [SURROUND] — Use this switch to listen to the speaker systems connected to the SPEAKERS SURROUND terminals

3. Monitors Selector Switches

Use this selector to select the monitors.

- [TAPE2/VIDEO1] — Use this switch to play the component connected to the TAPE2 /VIDEO1 TERMINALS.
- [TAPE3/VIDEO2] — Use this switch to play the component connected to the TAPE3 /VIDEO2 TERMINALS.
- [TAPE M. OFF] — Use this switch to not play a TAPE/VIDEO or MONITOR. (When you have set the function selector to PHONO MM, MC, TUNER, CD, AUX, TAPE1/ DAT for an alternative program source.)

4. Multi Operation Display Panel

5. Input Function Selector Switches

Use this selector to select the audio component for playback.

- [PHONO] — Press when playing records on a turntable.
- [TUNER] — Press when listening to a radio broadcast.
- [CD] — Press when playing compact disc on a CD Player.
- [AUX] — Press when playing to programs from a component connected to the AUX terminals.
- [TAPE1/DAT] — Press when playing to component connected to the TAPE1/DAT terminals.

6. Volume Control/Indicator

Use to adjust sound volume level.

Turn to the right side to increase volume.
Turn to the left side to decrease volume.

7. MM/MC Selector Switch

Set in accordance with the type of cartridge used in your record player. Press to turn to the unit MM and MC.

- [MM] : Depressed position — Set to this position when using an MM (moving magnet) cartridge or an MC (moving coil) cartridge with high output of 1 mV or more.
- [MC] : Release position — Set to this position when using an MC (moving coil) cartridge.

NOTE:

This selector switch can also be used with only PHONO function.

8. High Filter Switch

Use this switch when effective in suppressing high-frequency noise or noise from scratches on records being played.

The high filter serves to attenuate frequencies higher than 8 KHz in a 6 dB/oct slope.

9. Subsonic Filter Switch

Use this switch when playing records with coarse grooves.

The subsonic filter serves to attenuate frequencies lower than 15 Hz in a 6 dB/oct slope.

10. Meter Range Switch

11. Video 2 Front Panel Input Terminals

Use to connect a second video cassette recorder.

NOTE:

When using this terminals, do not connected at VIDEO 2 rear panel input terminals.

12. Mute Switch

Use to temporarily reduce the sound volume to MIN. The volume is restored when pressed again.

13. Rec Selector Switches

Switch to select recording signal.

When set at other than SOURCE or OFF position, signals can be recorded during playback of the equipment selected by input selector switches.

[OFF]	— In this position nothing from the REC terminals of TAPE1/DAT, TAPE2/VIDEO1, TAPE3/VIDEO2 will be output. Select it when not recording, output terminal will be disconnected, improving sound quality.
[SOURCE]	— To record the equipment selected by INPUT SELECTOR switches.
[TUNER]	— To record from a TUNER.
[COPY 1>2]	— To copy the TAPE2/VIDEO1 playback onto TAPE3/VIDEO2.
[COPY 2>1]	— To copy the TAPE3/VIDEO2 playback onto TAPE2/VIDEO1.

14. Source Direct Switch

Use this switch when you do not want to pass the output from input terminal equipment through the TONE circuit.

15. Balance Control

Use to adjust the sound balance between the left and right speakers.

When turned to the L side, the sound of the right speaker decreases.

When turned to the R side, the sound of the left speaker decreases.

16. Treble Tone Control

Use to adjust the high-frequency tone at low volume level.

The center position is the flat(normal) position. When turned to the right, high-frequency tones are emphasized; When turned to the left, high-frequency tones are de-emphasized.

17. Bass Tone Control

Use to adjust the low-frequency tone at low volume level.

The center position is the flat(normal) position. When turned to the right, low-frequency tones are emphasized; When turned to the left, low-frequency tones are de-emphasized.

NOTE:

These functions (TREBLE, BASS) does not operate when the SOURCE DIRECT switch is ON position.

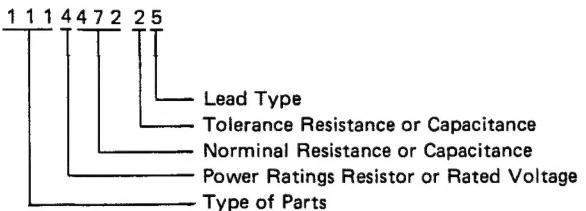
18. Phones Jacks

When using headphones, insert the plug into this jacks.

ELECTRICAL PARTS LIST

NOTE:

When ordering parts first convert parts number into code form as shown in the following examples.



RESISTOR

ex) Power Ratings Resistors

8 ... 1/8W	4 ... 1/4W	5 ... 1/2W
1 ... 1W	2 ... 2W	7 ... 4W

ex) Resistor Value

479 ... 4.7Ω	560 ... 56Ω	681 ... 680Ω
822 ... 8.2KΩ	123 ... 12KΩ	224 ... 220KΩ

*CARBON film Resistor; 1 [1] 437225 (3.7KΩ, 1/4W)

CAPACITANCE

ex) Rated Voltage

0 ... 4V	1 ... 6.3V	2 ... 10V	3 ... 16V
4 ... 25V	5 ... 35V	6 ... 50V	7 ... 63V
8 ... 80V	9 ... 100V		

ex) Type of Ceramic Capacitor

71 ... CKDYB	75 ... CKDYF	80 ... CCDCH
88 ... CCDSL	84 ... CCDRH	86 ... CCDTH

ex) Capacitor Value

040 ... 4pF	470 ... 47pF	221 ... 220pF
182 ... 1800pF	103 ... 0.01 μF	473 ... 0.047 μF

ex) Tolerance Capacitance

0 ... C = ±0.25pF	1 ... D = ±0.5pF	2 ... F = ±1pF
3 ... G = ±2%	4 ... J = ±5%	5 ... K = ±10%
9 ... Z = +80%	6 ... M = ±20%	
		-20%

*ELECTROLYTIC CAP:1 [4][2] 647365
(0.047 μF, 50V, ±20%)

*CERAMIC CAP:1 [8][8] 647241
(4700pF, 50V, ±20%)

*MYLAR CAP:1 [5][0] 647251
(4700pF, 50V, ±10%)

*STYROL CAP:1 [5][3] 643141
(430pF, 50V, ±5%)

MAIN P.C. BOARD PARTS

REF. NO.	PARTS NO.	DESCRIPTION
• SEMICONDUCTORS		
IC802	244032463	BA10393
IC801	244033063	BA6138
IC401,403	244121071	MC7815
IC402	244121171	MC7915
IC404	244143571	MC7806
Q307,308	240215811	2SC2705P-0
Q309,310	240215711	2SC2603F
Q313,314	240014721	KTA968Y
Q301,302,303,304	240011425	KTA970BL
Q605	240210925	KTC1627A-Y
Q603,604	240211135	KTC1815GR
Q311,312	240216521	KTC2238Y
Q305,306,601,602	240211825	KTC2240BL
Q801	240610411	KRC1203
D401	241355991	KBPC25-02
D303,304,307,308	242603911	HZS4BLL
D406,601,602	242102735	1N4371A
D607	242115035	1N965B
D407	242122035	1N969B
D402,403,404,405, 610	241358165	1N4003L
D301,302,305,306 603-606,608,609 809-814	241017995	1SS133
• RELAY AND COIL		
RY101	214011701	VB24MBU
L301,302	212930501	0.7μH
• CAPACITORS		
C401,402	199111001	10000μF/80V
C601,602	144601065	1μF/50V, NP
C605	141901065	1μF/100V
C405	141910065	10μF/100V
C403,404	141610267	1000μF/50V
C415	199810101	0.01μF/250V
C311,312	188F02015	2P/500V
C313,314	188F06011	6P/500V
C319,320,321,322	188F10155	100P/500V

SPEAKER P.C. BOARD PARTS

REF. NO.	PARTS NO.	DESCRIPTION
● RESISTORS		
AR801	134010701	22Kx7, 1/4W
AR802,803	134099801	4.7Kx7, 1/4W
R343,344	139020301	0.27x2, 5W+5W
R613,405	114210223	1K, 2W, 5%, LMF
R612	114168223	6.8K, 1W, 5%, LMF
R349, 350	114233123	330, 2W, 5%, LMF
R345-348, 402-404	114110023	10, 1W, 5%, LMF
R609	130410121	100, 1/4W, 5%, PSF
R339,340	130422121	220, 1/4W, 5%, PSF
R337,338,341,342	130447921	4.7, 1/4W, 5%, PSF
R315,316	112410121	100, 1/4W, 5%, PMF
R333,334,335,336	112422121	220, 1/4W, 5%, PMF
R401	112447921	4.7, 1/4W, 5%, PMF
● OTHERS		
PHONE JACK	215559901	LGR4502-5000
HEAT SINK	371070202	40mm. AI
CONNECTOR, 7P	215858201	DO607 #01
● SEMICONDUCTORS		
Q607,609,611	240210925	KTC1627A-Y
Q606,608,610	240610411	KRC1203
D611,612,613	241017995	1SS133
● RESISTORS		
R616,619,622	114210223	1K, 2W, 5%, LMF
● RELAY AND OTHERS		
RY102,103,104	214011701	VB24MBU
SPEAKER TERMINAL	215575301	4P
PIN JACK	215560201	2P, P:14
MINI JACK	215551701	NKN-007-01

VOLUME P.C. BOARD PARTS

REF. NO.	PARTS NO.	DESCRIPTION
● SEMICONDUCTORS		
IC701	244215375	TA7291S
Q701	240211135	KTC1815GR
● COIL		
L702,703	212930401	10μH
L701	213050201	100μH
● OTHERS		
VR701	250133402	100KAx2, MOTOR

POWER SW P.C. BOARD PARTS

REF. NO.	PARTS NO.	DESCRIPTION
POWER SWITCH	220219501	ESB99713V
C900	199810101	0.01μF/250V

CONTROL 1 P.C. BOARD PARTS

REF. NO.	PARTS NO.	DESCRIPTION
• SEMICONDUCTORS		
IC104	244216575	TC9215P
IC201,202	244152041	NJM4558DD
Q501	240210925	KTC1627A-Y
Q101,102	240215415	KTC2878-A
Q103	240011835	KTA1015GR
IC803	260011701	TMP47C670N
X801	213835901	CST4.19MGW
D201,801-808,815	241017995	ISS133
• CAPACITORS		
C805	251682501	0.047F/5.5V
• RESISTORS		
VR202,203	250133101	100Kx2, 20C
VR201	250133201	250Kx2, MN
• RELAY AND OTHERS		
RY201	214011401	RZ24
F.L.T	214323901	8LT08GK
S801-822	220899901	KHH-10910
CONNECTOR, 9P	215858401	W-DO609#01

CONTROL 2 P.C. BOARD PARTS

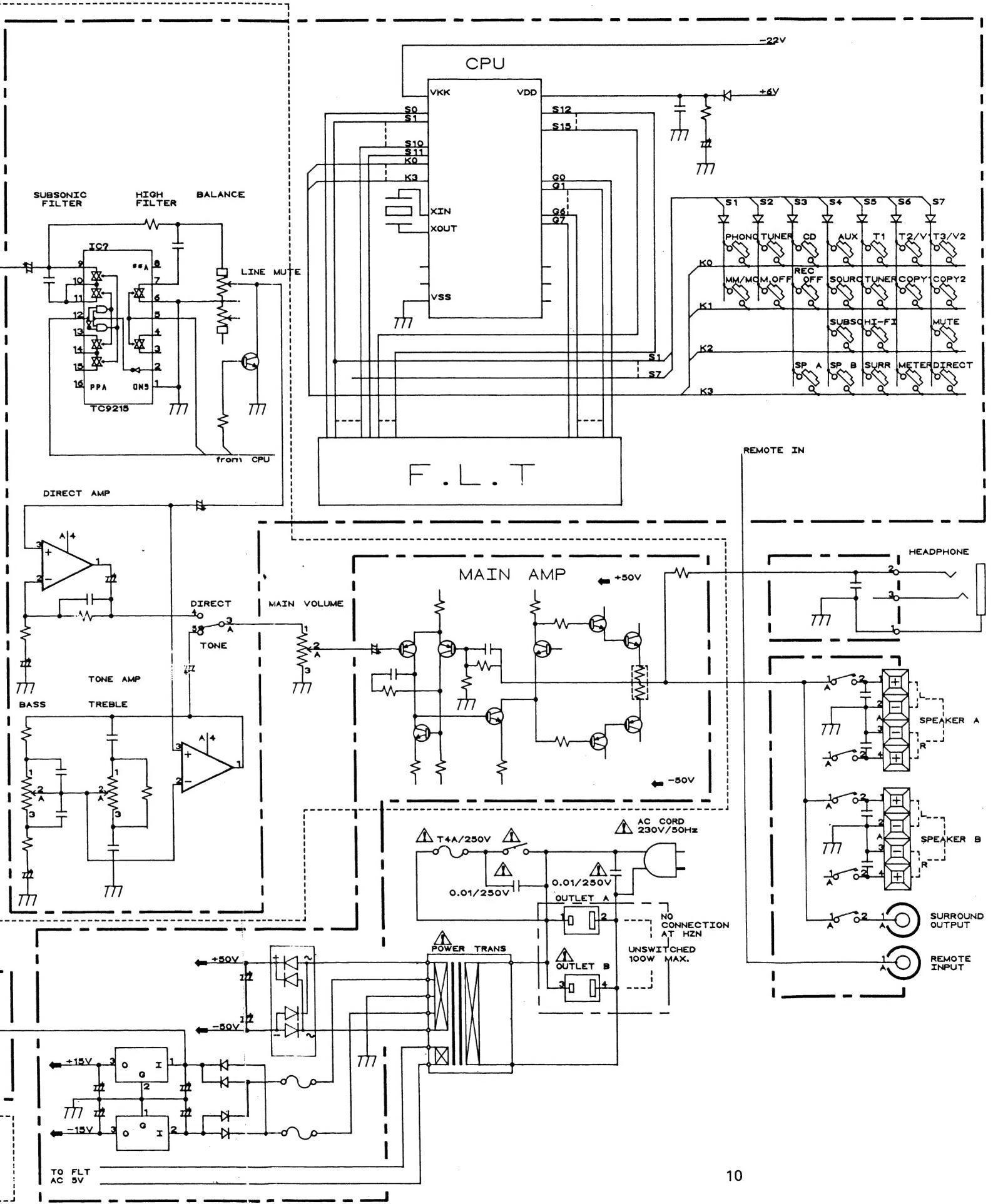
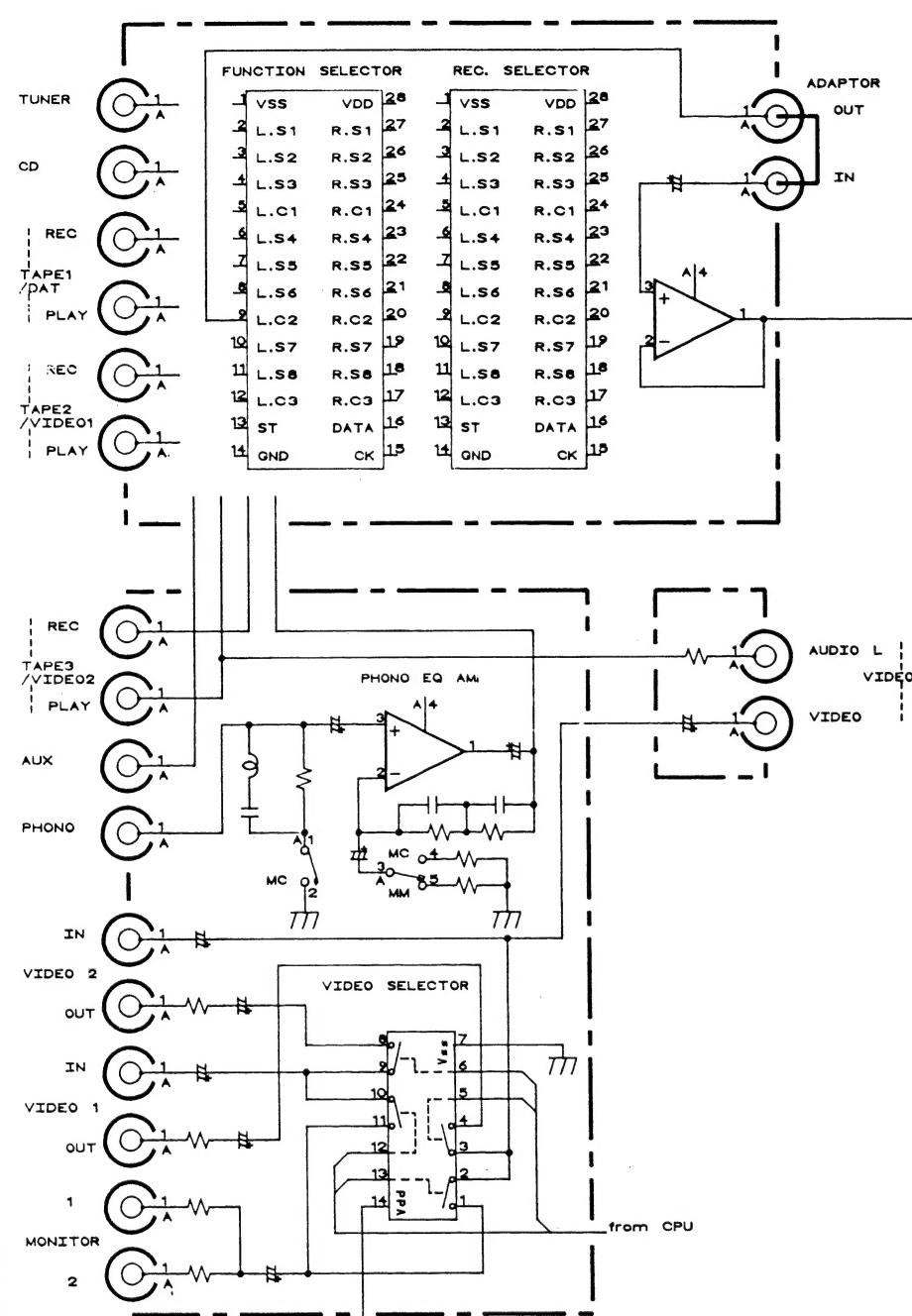
REF. NO.	PARTS NO.	DESCRIPTION
• SEMICONDUCTORS		
IC101,102	244214975	TC9163N
IC103	244152041	NJM4558DD
• OTHERS		
PIN JACK	215556201	4P, P:14

CONTROL 3 P.C. BOARD PARTS

REF. NO.	PARTS NO.	DESCRIPTION
• SEMICONDUCTORS		
IC501	244140552	M5220P
IC901	244080731	GD4066B
Q501	240210925	KTC1627A-Y
Q907	240211135	KTC1815GR
Q908,909,911	240211825	KTC2240BL
D501,502	241017995	ISS133
• COIL AND RESISTORS		
L503,504	212925001	2.2μH
R933	114110223	1K, 1W, 5%, LMF
• CAPACITORS		
C903,904,906	141310267	1000μF/16V
• OTHERS		
PIN JACK 1P	215560501	1P, GOLD YELLOW
PIN JACK 1P	215560601	1P, GOLD WHITE
PIN JACK 1P	215560701	1P, GOLD RED
PIN JACK 2P	215560101	2P, GOLD, P:14
PIN JACK 2P	215560201	2P, P:14
PIN JACK 2P	215560301	2P, YELLOW, P:14
PIN JACK 4P	215560401	4P, YELLOW, P:14

BLOCK DIAGRAM

L CHANNEL

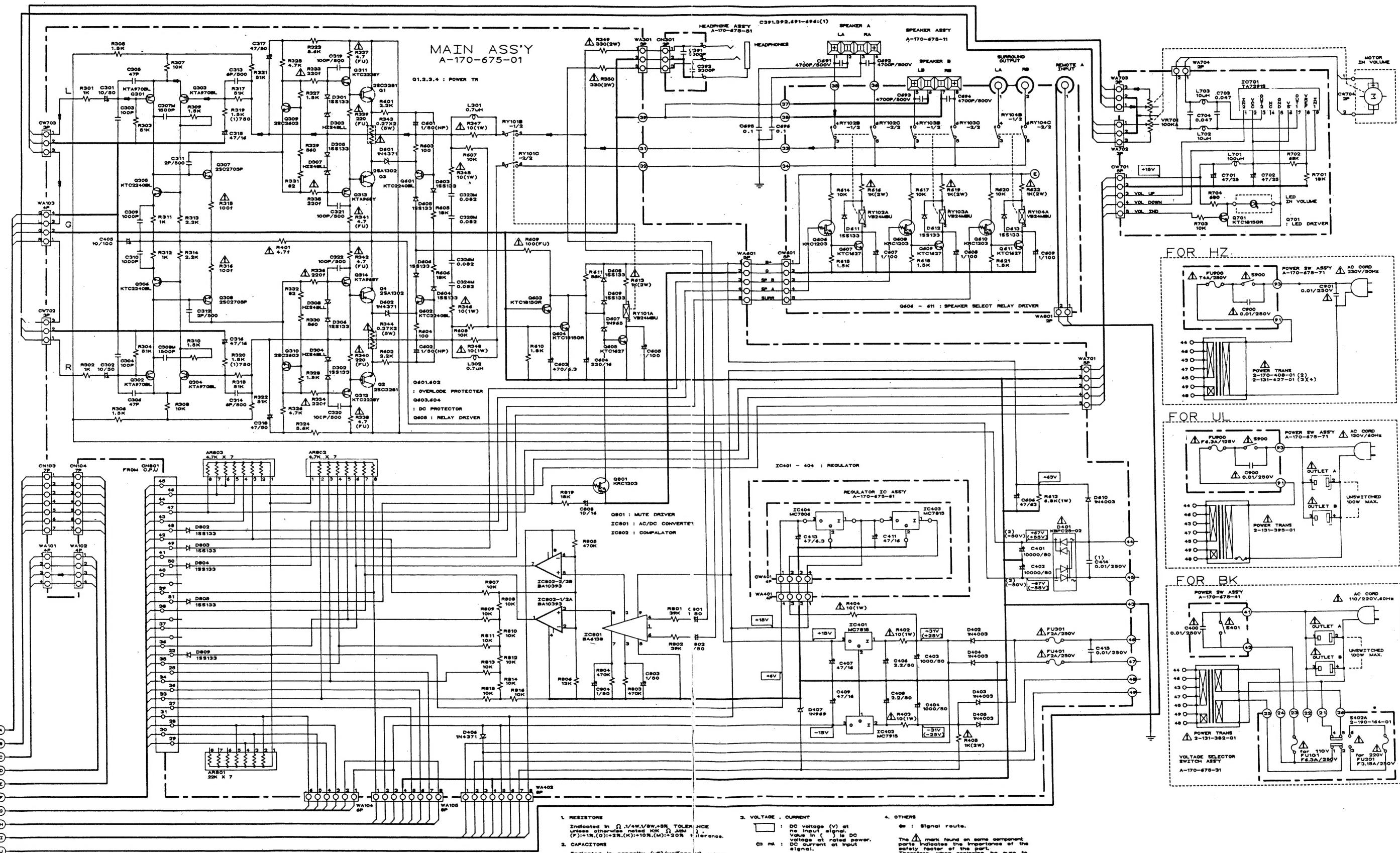


R CHANNEL

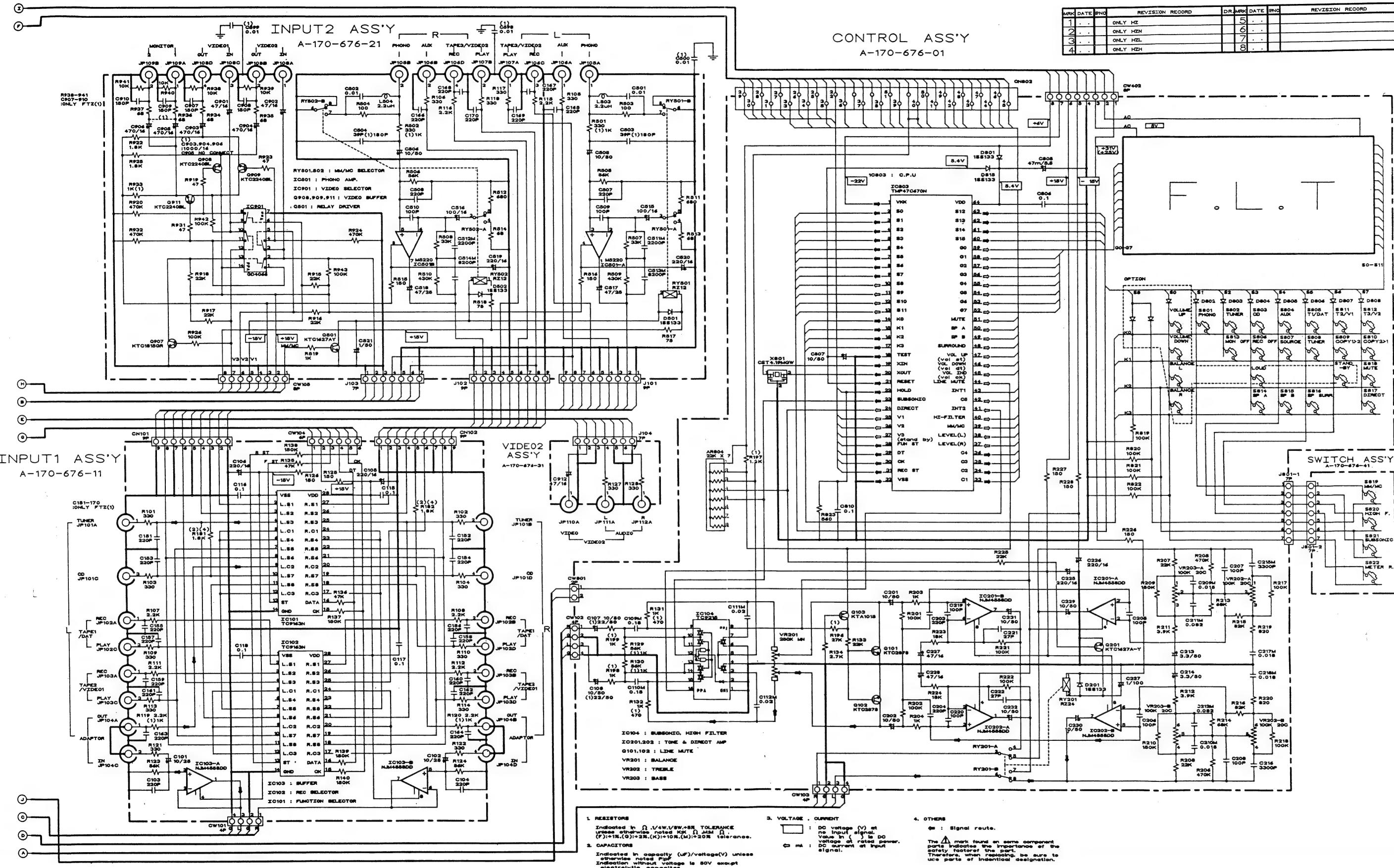
(THE SAME
AS THE L - CHANNEL)

SCHEMATIC DIAGRAM

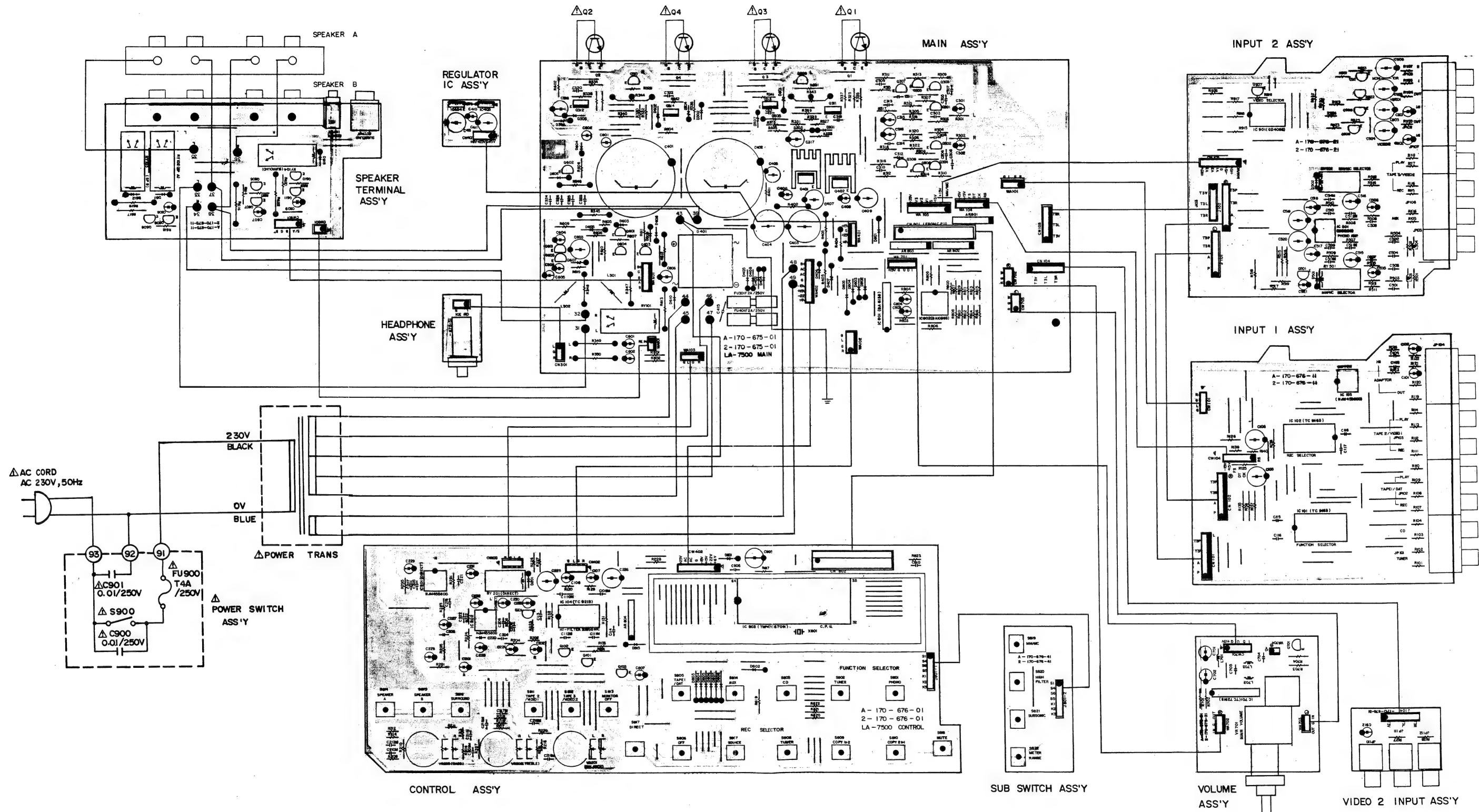
MRK DATE	IPNO	REVISION RECORD	DR.
1 ..	ONLY HZ	5 ..	
2 ..	ONLY HZN	6 ..	
3 ..	ONLY HZL	7 ..	
4 ..	ONLY HZH	8 ..	



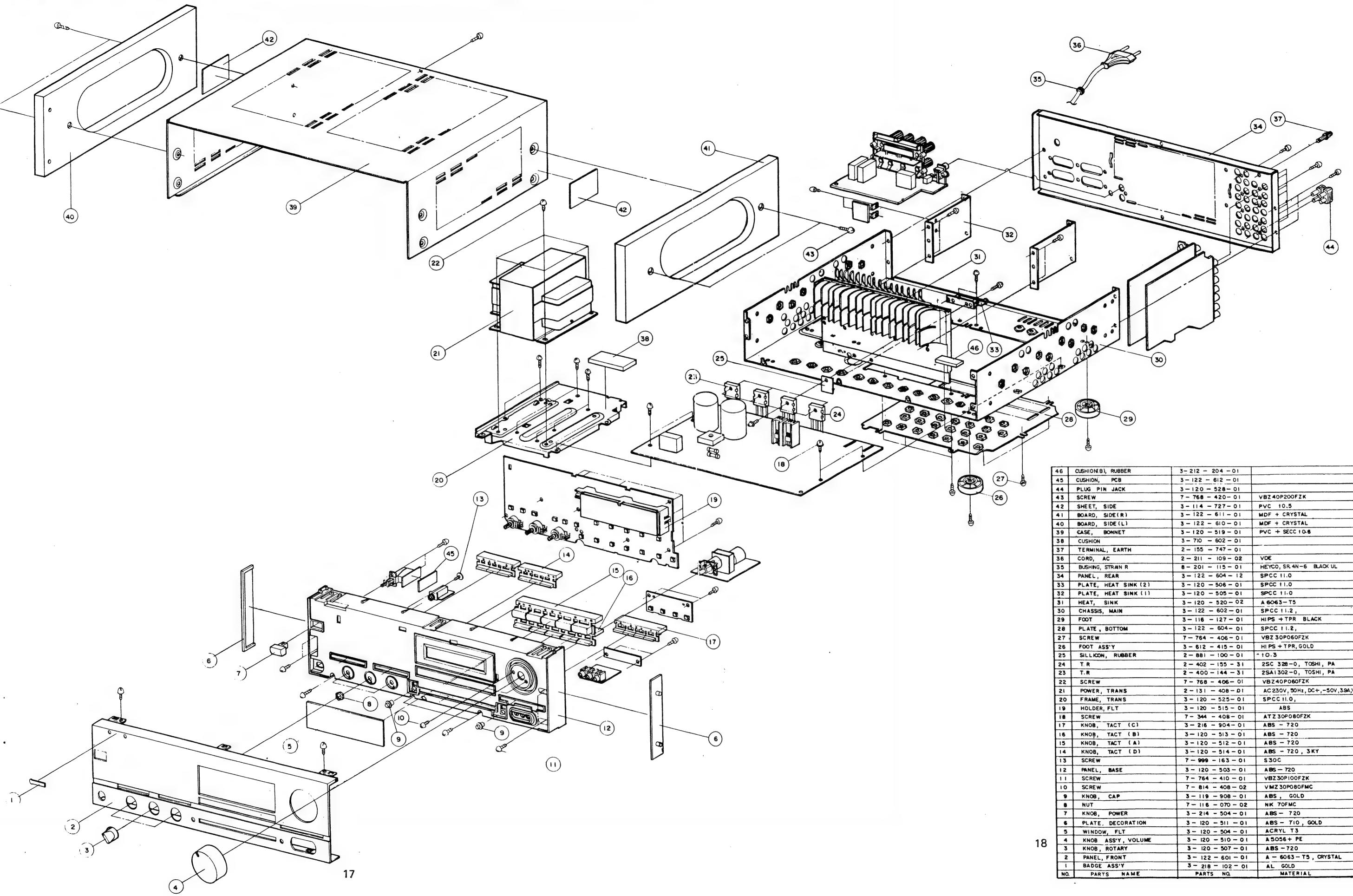
SCHEMATIC DIAGRAM



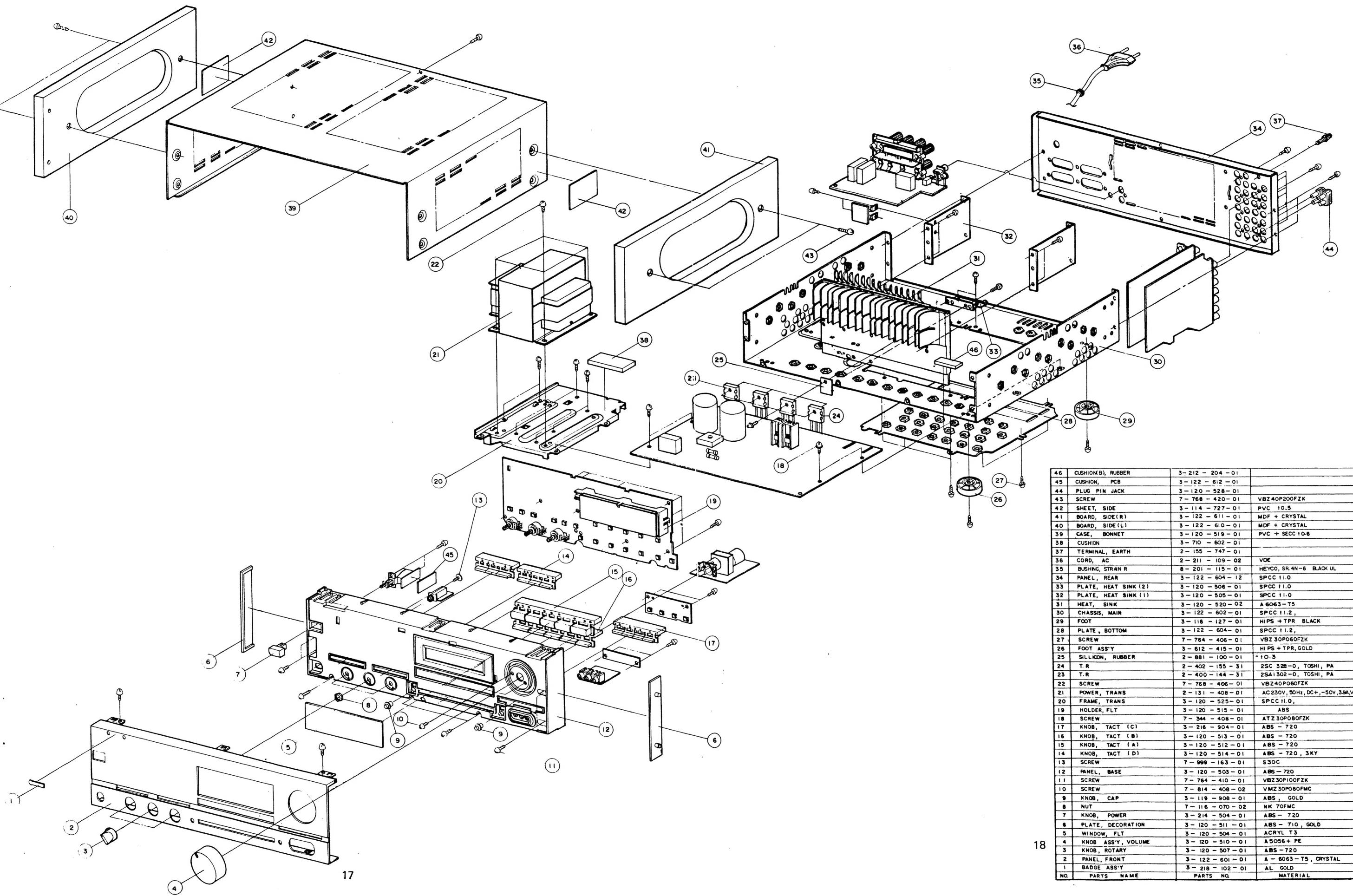
WIRING DIAGRAM



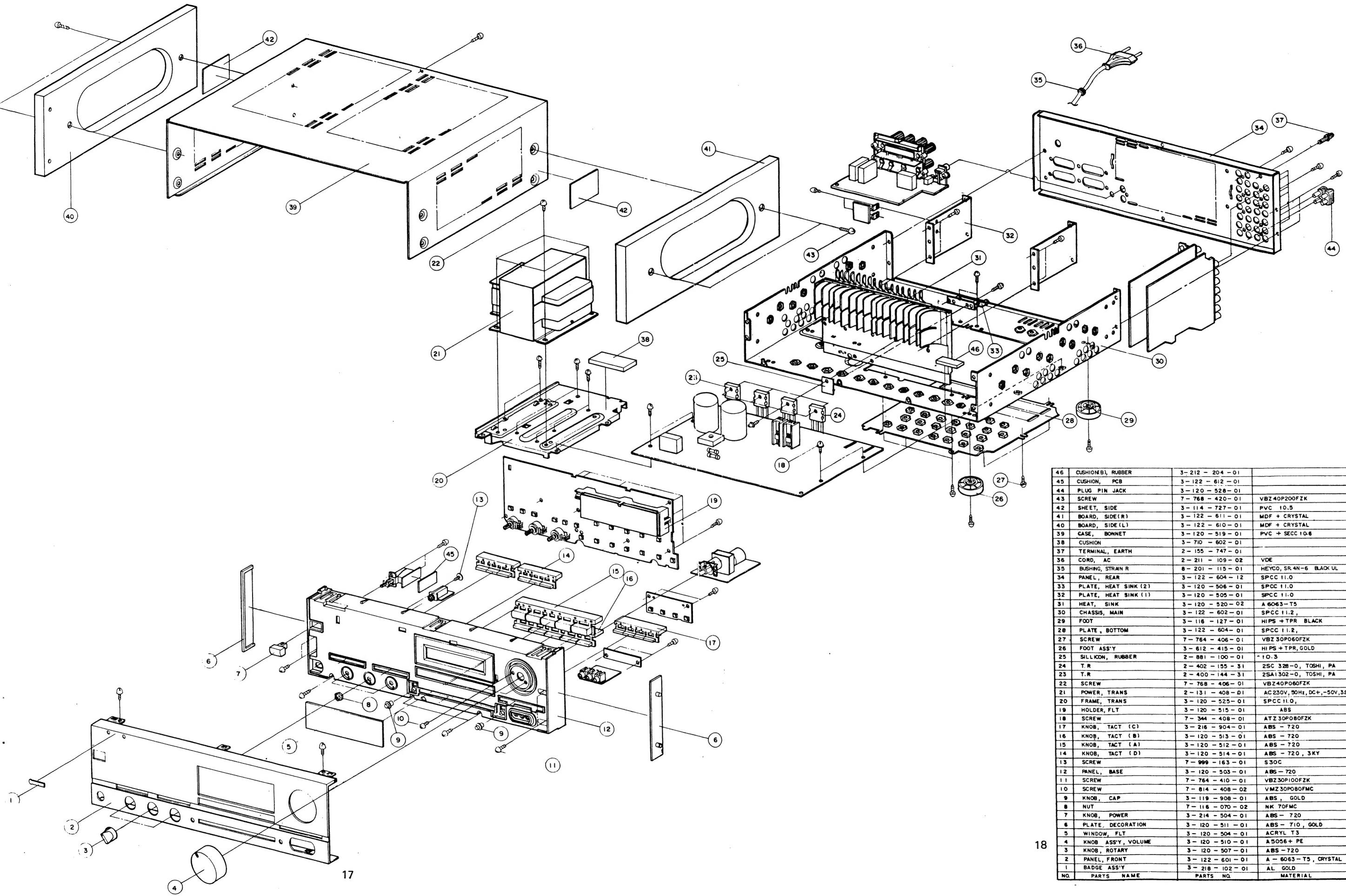
EXPLODED VIEW



EXPLODED VIEW

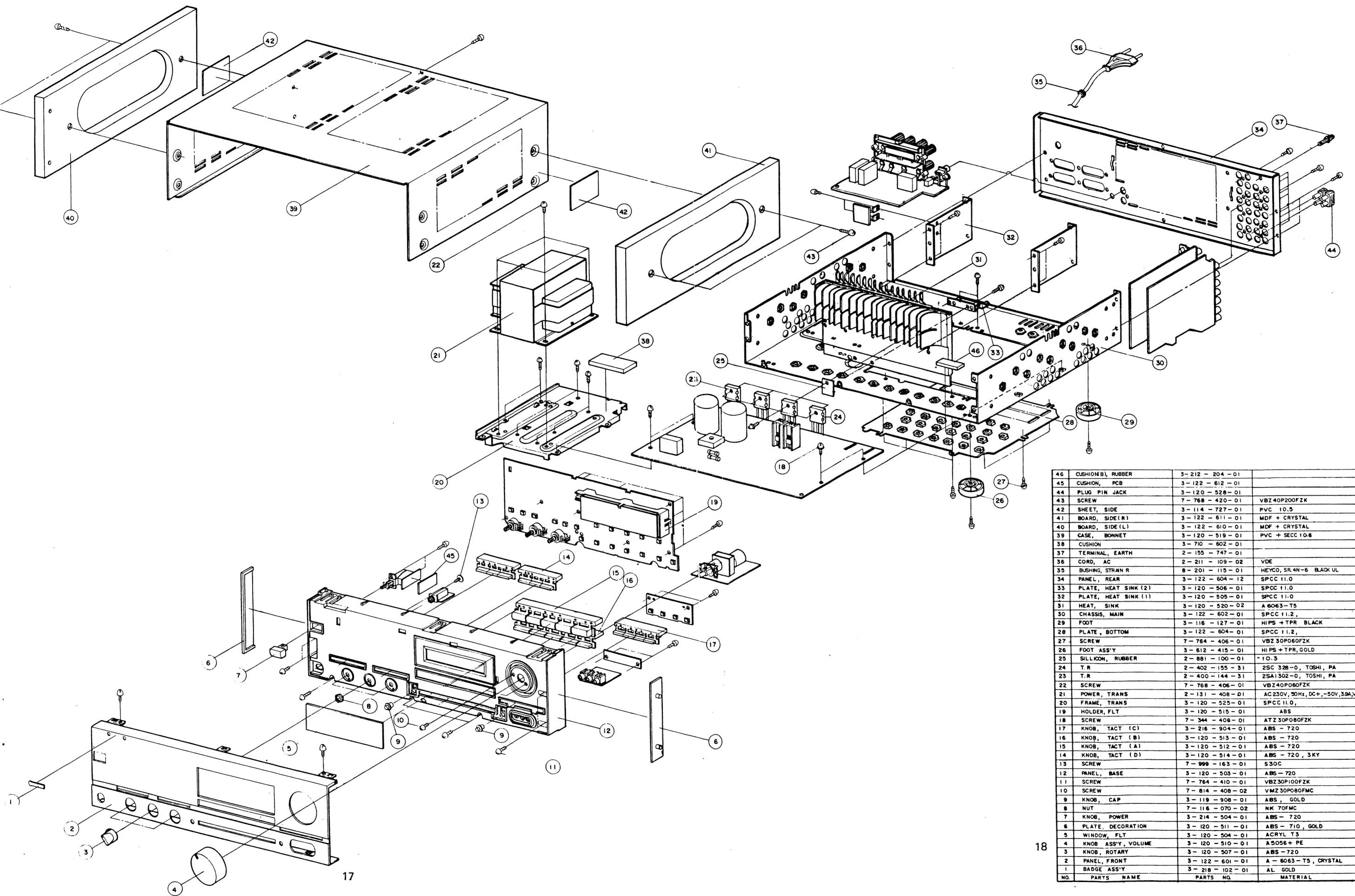


EXPLODED VIEW



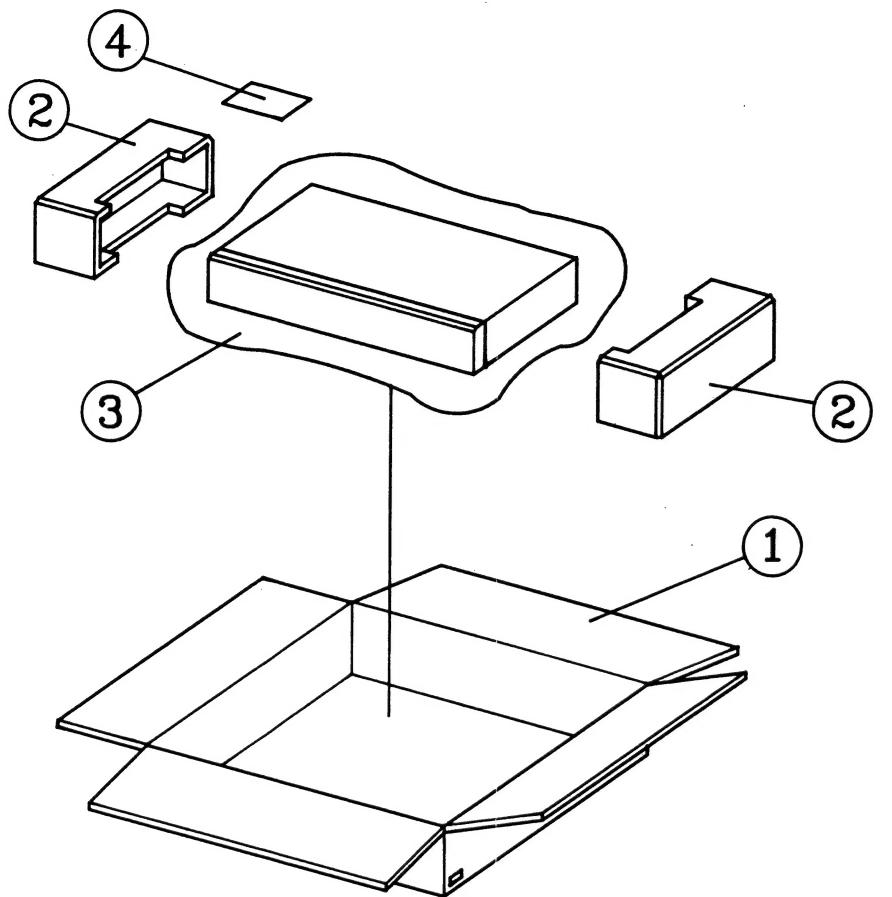
NO.	PARTS NAME	PARTS NO.	MATERIAL	Q'TY
46	CUSHION(B), RUBBER	3-212-204-01		1
45	CUSHION, PCB	3-122-612-01		1
44	PLUG PIN JACK	3-120-528-01		2
43	SCREW	7-768-420-01	VBZ40P200FZK	4
42	SHEET, SIDE	3-114-727-01	PVC 10.5	2
41	BOARD, SIDE(R)	3-122-611-01	MDF + CRYSTAL	1
40	BOARD, SIDE(L)	3-122-610-01	MDF + CRYSTAL	1
39	CASE, BONNET	3-120-519-01	PVC + SECC 10.6	1
38	CUSHION	3-71-602-01		1
37	TERMINAL, EARTH	2-155-747-01		1
36	CORD, AC	2-211-109-02	VDE	1
35	BUSHING, STRAN R	8-201-115-01	HEYCO, SR.4N-6 BLACK UL	
34	PANEL, REAR	3-122-604-12	SPCC 11.0	1
33	PLATE, HEAT SINK (2)	3-120-506-01	SPCC 11.0	1
32	PLATE, HEAT SINK (1)	3-120-505-01	SPCC 11.0	2
31	HEAT, SINK	3-120-520-02	A 6063-T5	1
30	CHASSIS, MAIN	3-122-602-01	SPCC 11.2,	1
29	FOOT	3-116-127-01	HIPS + TPR BLACK	2
28	PLATE, BOTTOM	3-122-604-01	SPCC 11.2,	1
27	SCREW	7-764-406-01	VBZ30P060FZK	26
26	FOOT ASS'Y	3-612-415-01	HIPS + TPR, GOLD	2
25	SILICON, RUBBER	2-881-100-01	-10.5	4
24	T.R	2-402-155-31	2SC 328-0, TOSHI, PA	2
23	T.R	2-400-144-31	2SA1302-0, TOSHI, PA	2
22	SCREW	7-768-406-01	VBZ40P080FZK	4
21	POWER, TRANS	2-311-408-01	AC230V, 50Hz, DC+, -50V, 59A,VDE	1
20	FRAME, TRANS	3-120-525-01	SPCC 11.0,	1
19	HOLDER, FLT	3-120-515-01	ABS	1
18	SCREW	7-344-408-01	ATZ30P080FZK	5
17	KNOB, TACT (C)	3-216-904-01	ABS - 720	1
16	KNOB, TACT (B)	3-120-513-01	ABS - 720	1
15	KNOB, TACT (A)	3-120-512-01	ABS - 720	1
14	KNOB, TACT (D)	3-120-514-01	ABS - 720, JKY	2
13	SCREW	7-999-163-01	S30C	2
12	PANEL, BASE	3-120-503-01	ABS - 720	1
11	SCREW	7-764-410-01	VBZ30P100FZK	47
10	SCREW	7-814-408-02	VMZ30P080FMC	2
9	KNOB, CAP	3-119-908-01	ABS, GOLD	2
8	NUT	7-116-070-02	NK 70FMC	3
7	KNOB, POWER	3-214-504-01	ABS - 720	1
6	PLATE, DECORATION	3-120-511-01	ABS - 710, GOLD	2
5	WINDOW, FLT	3-120-504-01	ACRYL T3	1
4	KNOB ASS'Y, VOLUME	3-120-510-01	A5056+ PE	1
3	KNOB, ROTARY	3-120-507-01	ABS - 720	3
2	PANEL, FRONT	3-122-601-01	A - 6063-T5, CRYSTAL	1
1	BADGE ASS'Y	3-218-102-01	AL GOLD	1

EXPLODED VIEW



PARTS	NAME	PARTS NO	MATERIAL	Q'TY
45	CUSHION, PCB	3-122-612-01		1
44	PLUG PIN JACK	3-120-528-01		2
43	SCREW	7-768-420-01	VBZ40P200FZK	4
42	SHET, SIDE	3-114-727-01	PVC 10.5	2
41	BOARD, SIDE(R)	3-122-611-01	MDF + CRYSTAL	1
40	BOARD, SIDE(L)	3-122-610-01	MDF + CRYSTAL	1
39	CASE, BONNET	3-120-519-01	PVC + SECC 10.6	1
38	CUSHION	3-710-602-01		1
37	TERMINAL, EARTH	2-155-747-01		1
36	CORD, AC	2-211-109-02	VDE	1
35	BUSHING, STRAIN R	8-201-115-01	HEYCO, SR.4N-6 BLACK UL	1
34	PANEL, REAR	3-122-604-12	SPCC 11.0	1
33	PLATE, HEAT SINK (2)	3-120-506-01	SPCC 11.0	1
32	PLATE, HEAT SINK (1)	3-120-505-01	SPCC 11.0	2
31	HEAT, SINK	3-120-520-02	A 6063-T5	1
30	CHASSIS, MAIN	3-122-602-01	SPCC 11.2	1
29	FOOT	3-116-127-01	HIPS + TPR BLACK	2
28	PLATE, BOTTOM	3-122-604-01	SPCC 11.2	1
27	SCREW	7-764-406-01	VBZ30P060FZK	26
26	FOOT ASS'Y	3-612-415-01	HIPS + TPR, GOLD	2
25	SILLICON, RUBBER	2-881-100-01	-10.5	4
24	T.R	2-402-155-01	2SC 328-0, TOSHI, PA	2
23	T.R	2-400-144-01	2SA1302-0, TOSHI, PA	2
22	SCREW	7-768-406-01	VBZ40P060FZK	4
21	POWER, TRANS	2-131-408-01	AC230V, 50Hz, DC+, -50V, 3.9A,VDE	1
20	FRAME, TRANS	3-120-525-01	SPCC 11.0	1
19	HOLDER, FLT	3-120-515-01	ABS	1
18	SCREW	7-344-408-01	ATZ30P080FZK	5
17	KNOB, TACT (C)	3-214-904-01	ABS - 720	1
16	KNOB, TACT (B)	3-120-513-01	ABS - 720	1
15	KNOB, TACT (A)	3-120-512-01	ABS - 720	1
14	KNOB, TACT (D)	3-120-514-01	ABS - 720 , 3KY	2
13	SCREW	7-999-163-01	S30C	2
12	PANEL, BASE	3-120-503-01	ABS - 720	1
11	SCREW	7-764-410-01	VBZ30P100FZK	47
10	SCREW	7-814-408-02	VMZ30P080FMC	2
9	KNOB, CAP	3-119-908-01	ABS - GOLD	2
8	NUT	7-116-070-02	HK 70FMC	3
7	KNOB, POWER	3-214-504-01	ABS - 720	1
6	PLATE, DECORATION	3-120-511-01	ABS - T10 , GOLD	2
5	WINDOW, FLT	3-120-504-01	ACRYL T3	1
4	KNOB ASSY, VOLUME	3-120-510-01	A5056+PE	1
3	KNOB, ROTARY	3-120-507-01	ABS - 720	3
2	PANEL, FRONT	3-122-601-01	A - 6063 - T5 , CRYSTAL	1
1	BADGE ASS'Y	3-210-102-01	AL GOLD	1

PACKING



NO	PARTS NUMBER	DESCRIPTION	Q'TY
1	3-122-606-01	PACKING CASE	1
2	3-120-523-01	SIDE PAD	2
3	3-415-046-01	POLY SHEET	1
4	3-122-607-01	OPERATING MANUAL	1
5			
6			